

Model FCIS (Connected Flood Control System)

Reduced Pressure Principle Assembly w/Integral Relief Valve Monitor and Automatic ACV Shutoff

Application

The Flood Control Integrated System (FCIS) prevents flooding of a building, caused by the discharge from a catastrophically fouled Reduced Pressure Principal backflow preventer. The pre-wired FCIS package includes a Reduced Pressure Principle backflow Preventer and Monitor Switch with Zurn Connected Endpoint Controller attached to a Solenoid Control Valve to shut-off the water supply

Standards Compliance

For compliance approvals reference spec sheets

For additional compliance approvals reference spec sheets

Sizes (11/4" - 2") 975XL2 Sizes (11/4" - 2") ZW206 Zurn Connected Notifications Box - UL 1951 at www.zurn.com

Features

- Model 975XL2 Reduced Pressure Backflow Preventer with Monitor Switch
- ZW206 Solenoid Control Valve, 24 VAC operation, Normally Open (water is on during power failure)
 A manual operator on the solenoid is provided to operate the valve during power failure
- Zurn Connected Endpoint Controller

Sizes: 1 1/4", 1 1/2", 2"

Maximum working water pressure

Maximum working water temperature

Hydrostatic test pressure

End connections

175 PSI

140°F

350 PSI

End connections

(Threaded NPT) ANSI B1.20.1

Quick disconnect connectors Alarm Output contacts

For additional component features reference spec sheet ZW206

CAUTION: To prevent water damage, an adequately sized drain MUST still be installed to handle water discharge from the backflow relief valve.



(Model FCIS Shown)

Options

(Suffixes can be combined)

- \square S Threaded SXL Strainer Lead Free
- ☐ AG Air Gap Fitting
- ☐ C Model 40XL2 for upstream to prevent
 - water hammer discharge (1-1/4"-2")
- ☐ C Model 40XL2 for downstream to pre vent draining system (1-1/4" 2")
 - Solenoid Operation
 - ☐ Normally Open (Opens on power failure)
 - □ NC Normally Closed (Closes on power failure)
- □ RV ACV Pilot Installed on Reverse Side

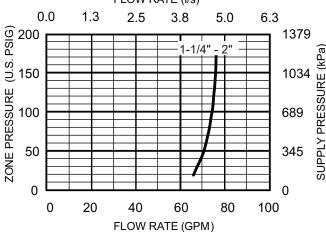
Relief Valve Discharge Rates

(Worst case condition- If 1st check or relief valve is lodged wide open)

Model 375, 475 & 975 RP & RPDA

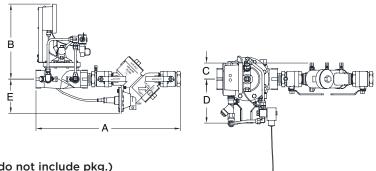
Backflow Preventers

FLOW RATE (I/s)



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Rev. C Date: 11/24 Document No. BF-FCIS -114-2 Product No. Model FCIS-114-2 Patent zurn.com/patents



Dimensions & Weights (do not include pkg.)

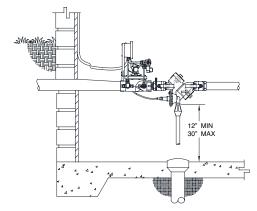
| MODEL FCIS SIZE | | DIMENSION (approximate) | | | | | | | | | | | | | |
|-----------------------|----|-------------------------|-----|----------|-----|--------|-----|------|----|-----|-----|-------|-----|--------|------|
| | | А | | В | | B* | | С | | D | | E | | WEIGHT | |
| in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | lbs. | kg |
| 11/4 | 32 | 24 9/16 | 624 | 16 1/2 | 419 | 20 | 508 | 31/2 | 89 | 7 | 178 | 6 3/4 | 171 | 47 | 21.3 |
| 11/2 | 40 | 25 1/16 | 637 | 16 1/2 | 419 | 20 | 508 | 31/2 | 89 | 7 | 178 | 6 3/4 | 171 | 47 | 21.3 |
| 2 | 50 | 28 9/16 | 725 | 16 13/16 | 427 | 20 1/3 | 516 | 31/2 | 89 | 7 | 178 | 6 3/4 | 171 | 60 | 27.2 |

This dimension is with position indicator on a ZW206

Installation

Modular system simplifies installation. Install ZW206 Solenoid Valve with Zurn Connected Endpoint Controller on the water inlet. Install Model 975XL2 backflow preventer to outlet of solenoid valve. From the Zurn Connected Endpoint Controller route the yellow cable to plug on the relief valve cover. Plug connector into monitor switch, screw lock ring into place and secure the cable to the assembly. Provide 120 VAC power to Zurn Connected Endpoint Controller and test operation per provided instructions. Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

Typical Installation



Single Water Shutdown

A single ZW206 Solenoid Control Valve to shutdown the water supply to the backflow preventer and system is our standard installation. This will prevent the discharge of water through a fouled first check in the static condition.

Specifications

The Flood Control Integrated System(FCIS) shall consist of a Reduced Pressure Principle Assembly (RP) (975XL2), a Solenoid Control Valve(SCV) (Model ZW206), and a Zurn Connected Endpoint Controller and shall be constructed and tested at the factory as a complete assembly. The RP shall be certified to NSF/ANSI 61, and shall be ASSE 1013 Listed. The RP shall be furnished with full port, resilient seated shut-off valves, and shall be equipped with an integral Relief Valve Monitor Switch that monitors the Relief Valve in a closed position. The seat ring and the check valves shall be Noryl, the stems and springs shall be Stainless Steel, and the elastomers shall be EPDM. The SCV shall be a single seated, linepressure-operated, diaphragm-actuated, pilot-controlled valve. The SCV shall seal by means of a corrosion resistant seat and a resilient, rectangular seat disc. The stem of the SCV shall be guided top and bottom by integral bushings, and shall contain no packing glands or stuffing boxes. The SCV shall be protected with internal and external FDA approved epoxy coating, and the diaphragm shall not be used as a seating surface. The Zurn Connected Endpoint Controller shall have an input voltage of 120 VAC, and shall be provided with outputs of 24 VAC and 120 VAC controlled by a user adjusted time delay relay. The Zurn Connected Endpoint Controller shall be housed in a water-tight fiberglass NEMA enclosure, and shall have both normally open and normally closed outputs. The three components, the RP, SVC, and Zurn Connected Endpoint Controller, when combined together, automatically shut off the water supply in the event of catastrophic relief valve discharge. The Reduced Pressure Principle Assembly, Solenoid Control Valve, and Zurn Connected Endpoint Controller assembled as a complete unit shall be the Zurn Wilkins FCIS.

| Job Name | Contractor | | | | | |
|--------------|------------|--|--|--|--|--|
| Job Location | Engineer | | | | | |
| | | | | | | |

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